

## REMARKS

The examiner has rejected claims 1-3 and 6-9 under 35 U.S.C. 102 as being anticipated by Ancimer (6,640,773), and has also rejected claims 4, 5, 10-12, 17-23, and 27-29 under 35 U.S.C. 103(a) as being obvious in light of the Ancimer reference. Applicant respectfully traverses these rejections and requests reconsideration of the application in view of the following remarks.

Independent claim 1 of the present invention recites a “combustion parameter determining means for determining values of one or more combustion parameters” and a “combustion control parameter control means, programmed ... to limit or counteract changes in said combustion parameter values” (emphasis added).

The examiner incorrectly points to fuel quantity, intake air temperature, EGR temperature and intake manifold pressure as “combustion parameters” monitored in Ancimer. This conflicts with applicant’s use of the term “combustion parameters” in the claims and specification. Indeed, in the specification, “combustion parameters” are defined in paragraph [005] (page 3, lines 1-3) and paragraph [019] (page 9, lines 2-14) as referring to characteristics of the timing, duration, or rate of combustion, such as the maximum rate of pressure rise, location of peak combustion pressure, the crank angle location of the combustion event, or the beginning of rapid combustion. Thus, as defined in the present application, the cited Ancimer reference discloses neither the determining of combustion parameter values in combustion nor a control means programmed to limit or counteract changes in such combustion parameter values. While Ancimer discloses measuring data regarding various external operating conditions that affect combustion, it

does not disclose control of HCCI combustion based on values of one or more  
"combustion parameters."

Similarly, independent claim 17 of the present invention recites "determining one or more combustion parameters of the combustion" and the preferred step of "controlling the quantity of fuel used in combustion ... to offset or limit changes in the combustion parameter(s)," neither of which feature is disclosed in Ancimer.

Rejected dependent claims 2-12, 18-23, and 27-29 are dependent on either independent claim 1 or 17, and are therefore also allowable for the same reasons.

Given the foregoing, applicant respectfully submits that the claims as currently presented are allowable. Favorable consideration and a Notice of Allowance are solicited.

Respectfully submitted,



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